



US00D489741S

(12) **United States Design Patent**
Calco et al.

(10) **Patent No.:** **US D489,741 S**

(45) **Date of Patent:** **** May 11, 2004**

(54) **APPARATUS FOR MELTING THERMOPLASTIC MATERIAL**

(75) Inventors: **Wayne A. Calco**, Mountain View, CA (US); **David F. Bullock**, Monterey, CA (US); **Dale T. Christensen**, Castroville, CA (US); **Daniel J. Chen**, Atlanta, GA (US); **Paul S. Frates**, Lawrenceville, GA (US); **William A. Lewis**, Lilburn, GA (US); **Kenneth E. Rothrauff**, Suwanee, GA (US)

(73) Assignee: **Nordson Corporation**, Westlake, OH (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/170,100**

(22) Filed: **Oct. 31, 2002**

(51) **LOC (7) Cl.** **15-09**

(52) **U.S. Cl.** **D15/144**

(58) **Field of Search** D15/144, 144.1, D15/144.2; 222/146.5, 152, 156, 189.06, 397; 219/424

(56) **References Cited**

U.S. PATENT DOCUMENTS

D270,353 S	8/1983	Lewellen	
D276,617 S	12/1984	Scholl et al.	
4,485,942 A	* 12/1984	Petrecca	222/146.5
D360,422 S	7/1995	Frates et al.	
D388,800 S	* 1/1998	Zook et al.	D15/144
D425,530 S	5/2000	Lafitte	

OTHER PUBLICATIONS

NCG Hotmelt Equipment; Airprint Systems, Inc.; (brochure).
The Valco Hot Melt System; Valco Cincinnati; (brochure).
1996 Adhesives and Sealants Equipment Catalog; Nordson Corporation; pp. 1-1 to 1-84; 2-i to 2-9; and 13-20.
Packaging Newslines; ITW (brochure).

Slutterback® HotMelt Applicator Systems; 1996.

* cited by examiner

Primary Examiner—Antoine Duval Davis

(74) *Attorney, Agent, or Firm*—Raymond J. Slattery, III

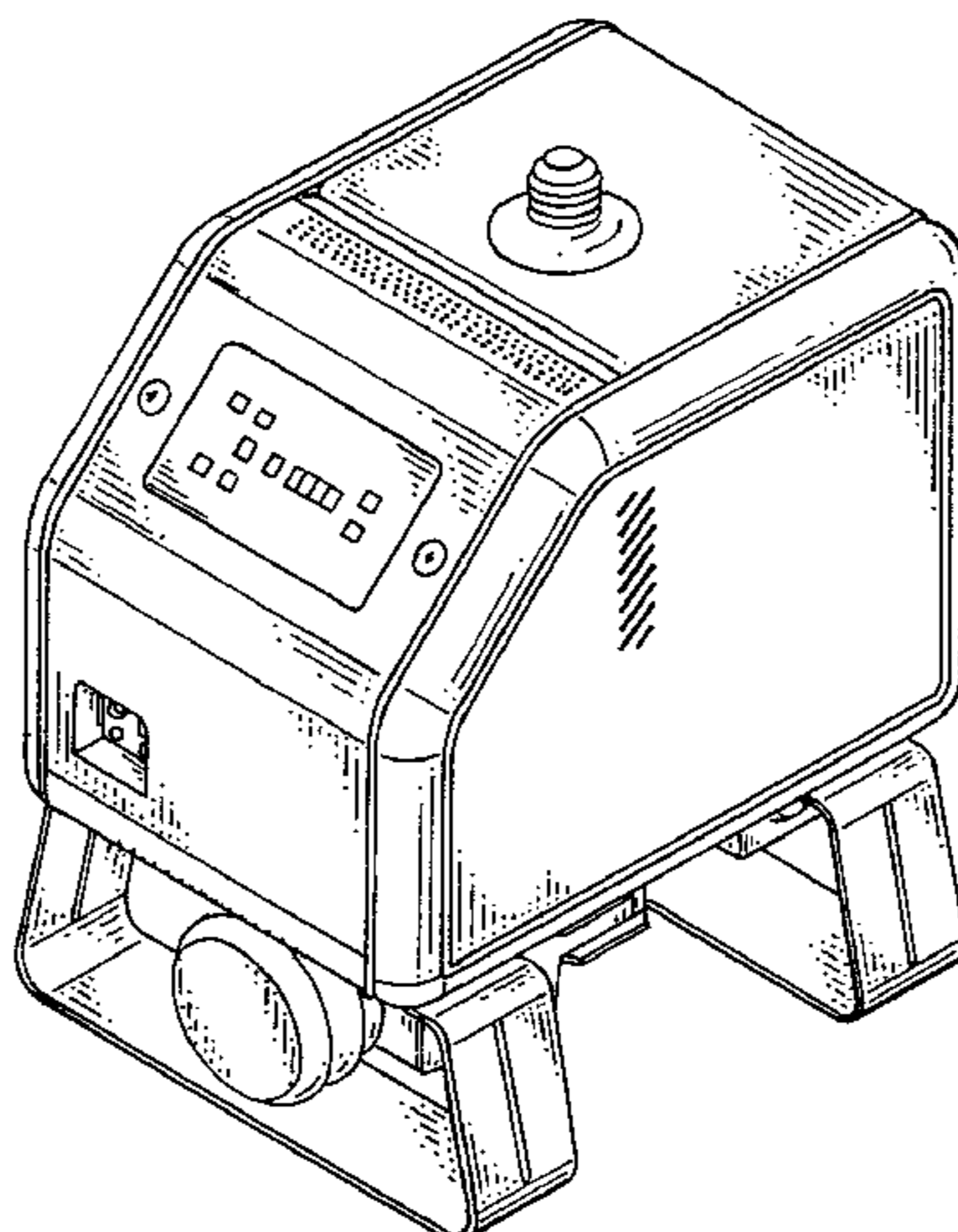
(57) **CLAIM**

The ornamental design for an apparatus for melting thermoplastic material, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective elevational view of an apparatus for melting thermoplastic material showing according to a first embodiment of our new design; FIG. 2 is a front elevational view; FIG. 3 is a right elevational view wherein the left elevational view being a mirror image; FIG. 4 is a top plan elevational view; FIG. 5 is a rear elevational view; FIG. 6 is a front perspective elevational view of an apparatus for melting thermoplastic material according to another embodiment of our new design; FIG. 7 is a front elevational view of the embodiment of FIG. 6; FIG. 8 is a right side elevational view of the embodiment of FIG. 6 wherein the left elevational view being a mirror image; FIG. 9 is a top plan elevational view of the embodiment of FIG. 6; FIG. 10 is a rear elevational view of the embodiment of FIG. 6; FIG. 11 is a front perspective elevational view of an apparatus for melting thermoplastic material according to still another embodiment of our new design; FIG. 12 is a front elevational view of the embodiment of FIG. 11; FIG. 13 is a right elevational view of the embodiment of FIG. 11 wherein the left elevational view being a mirror image; FIG. 14 is a top plan elevational view of the embodiment of FIG. 11; and, FIG. 15 is a rear elevational view of the embodiment of FIG. 11.

1 Claim, 6 Drawing Sheets



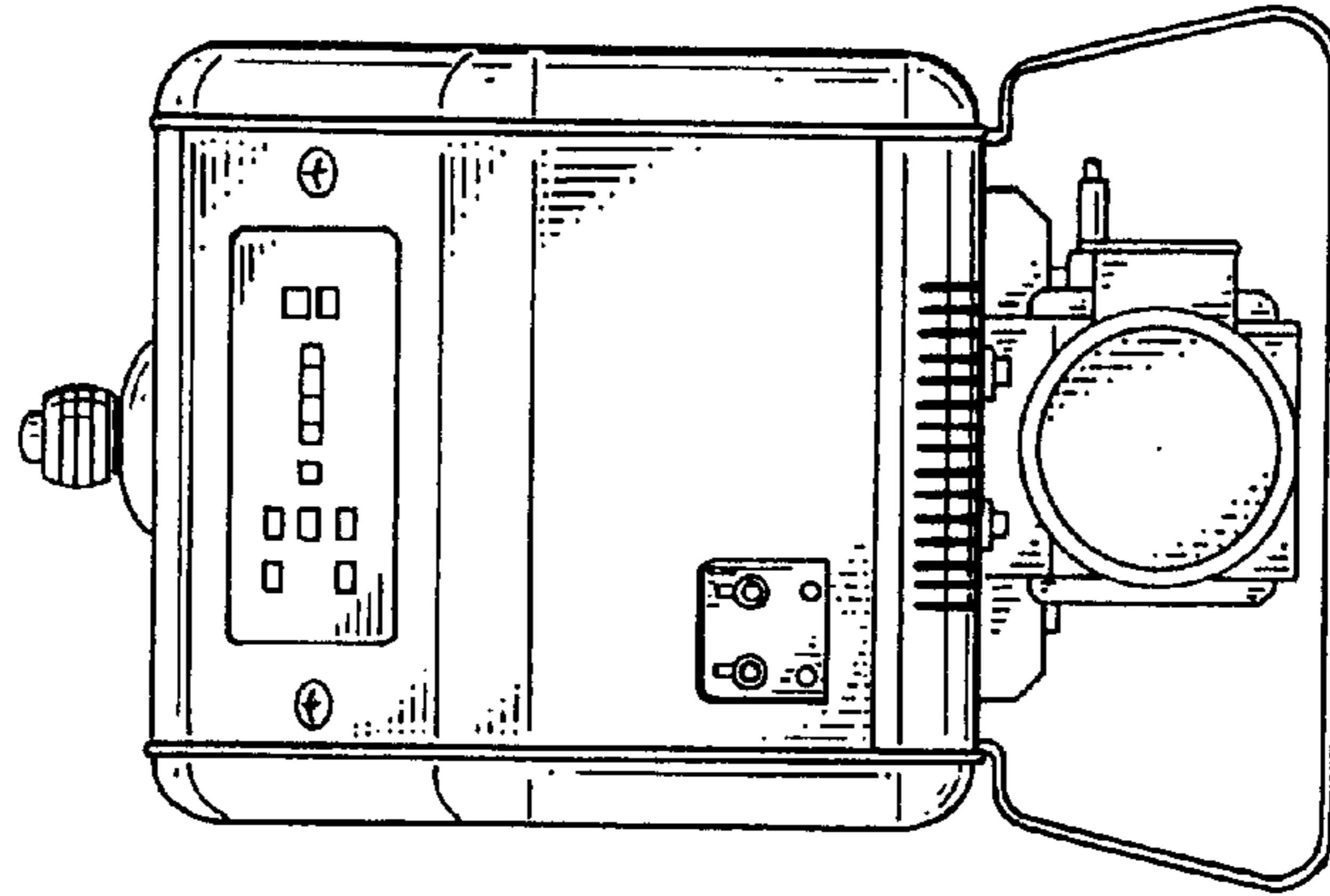


FIG. -2

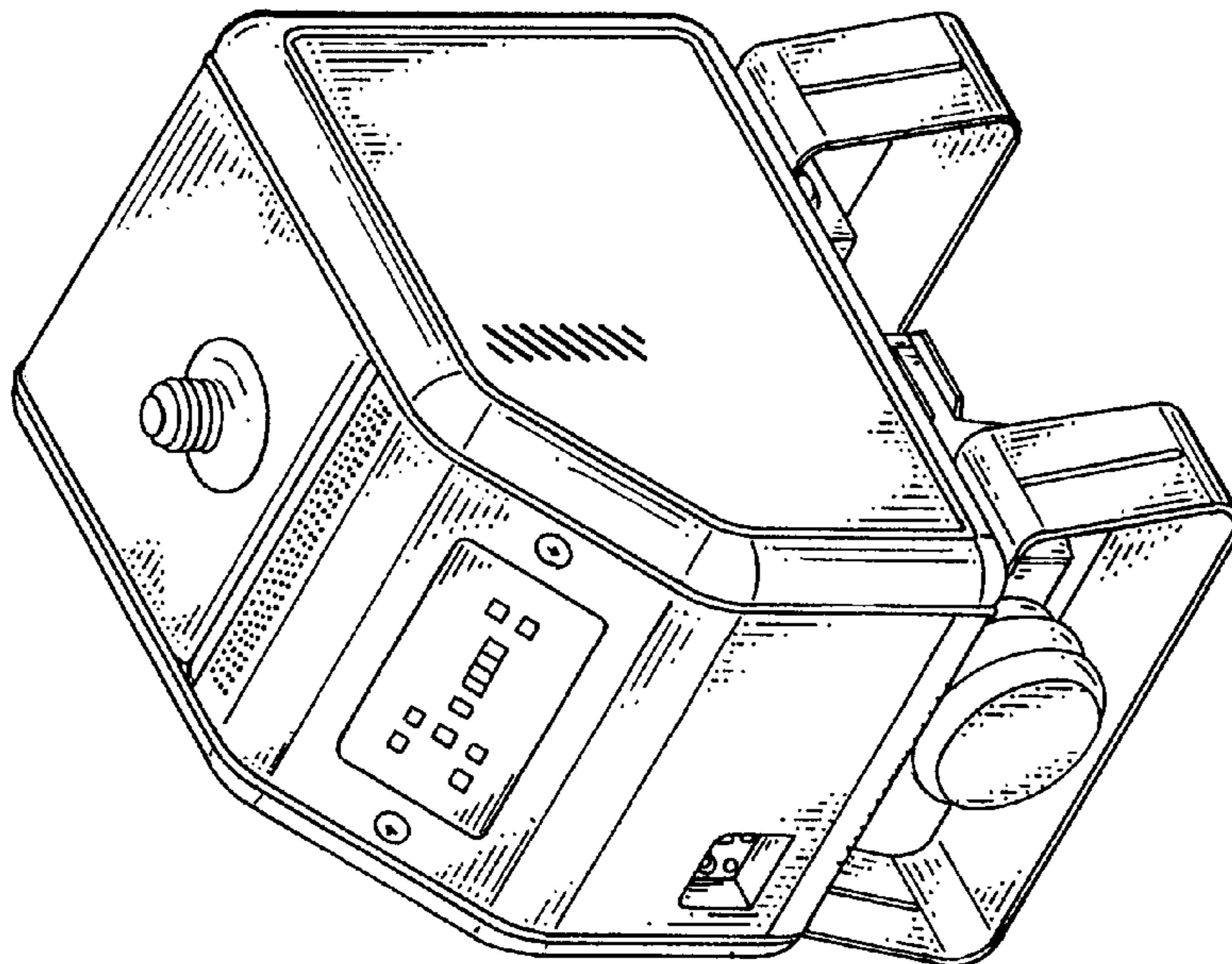


FIG. -1

FIG.- 4

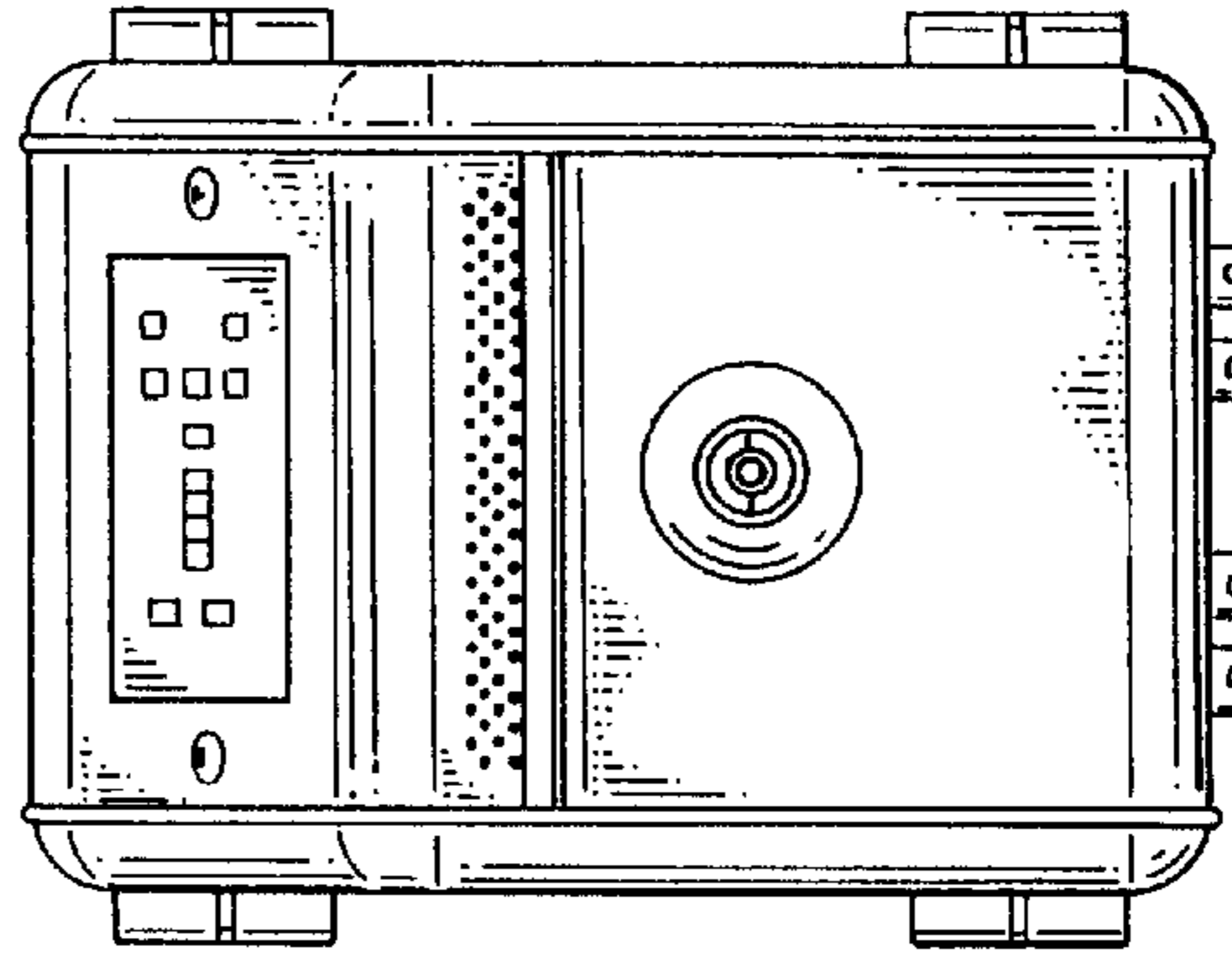


FIG.- 3

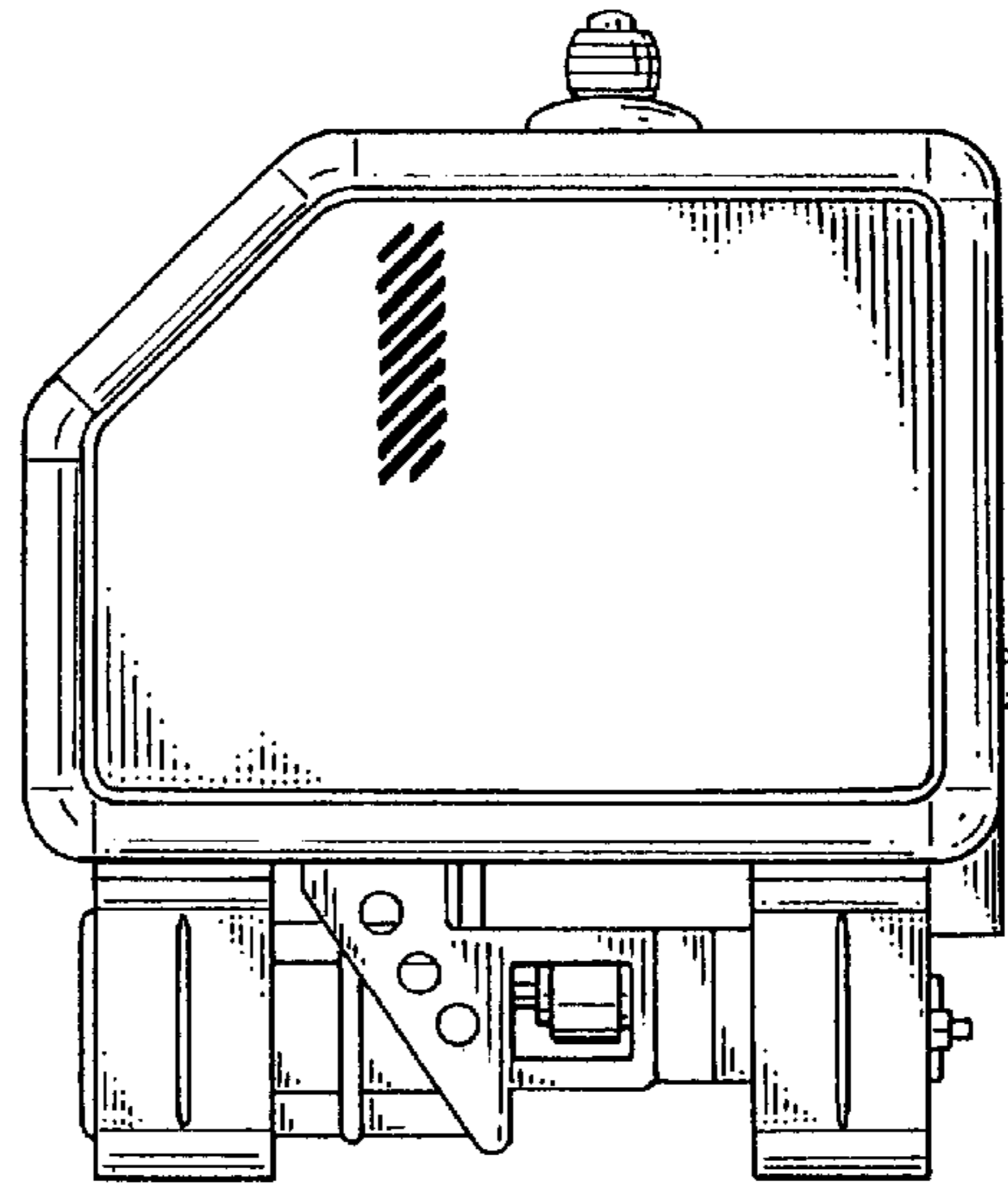
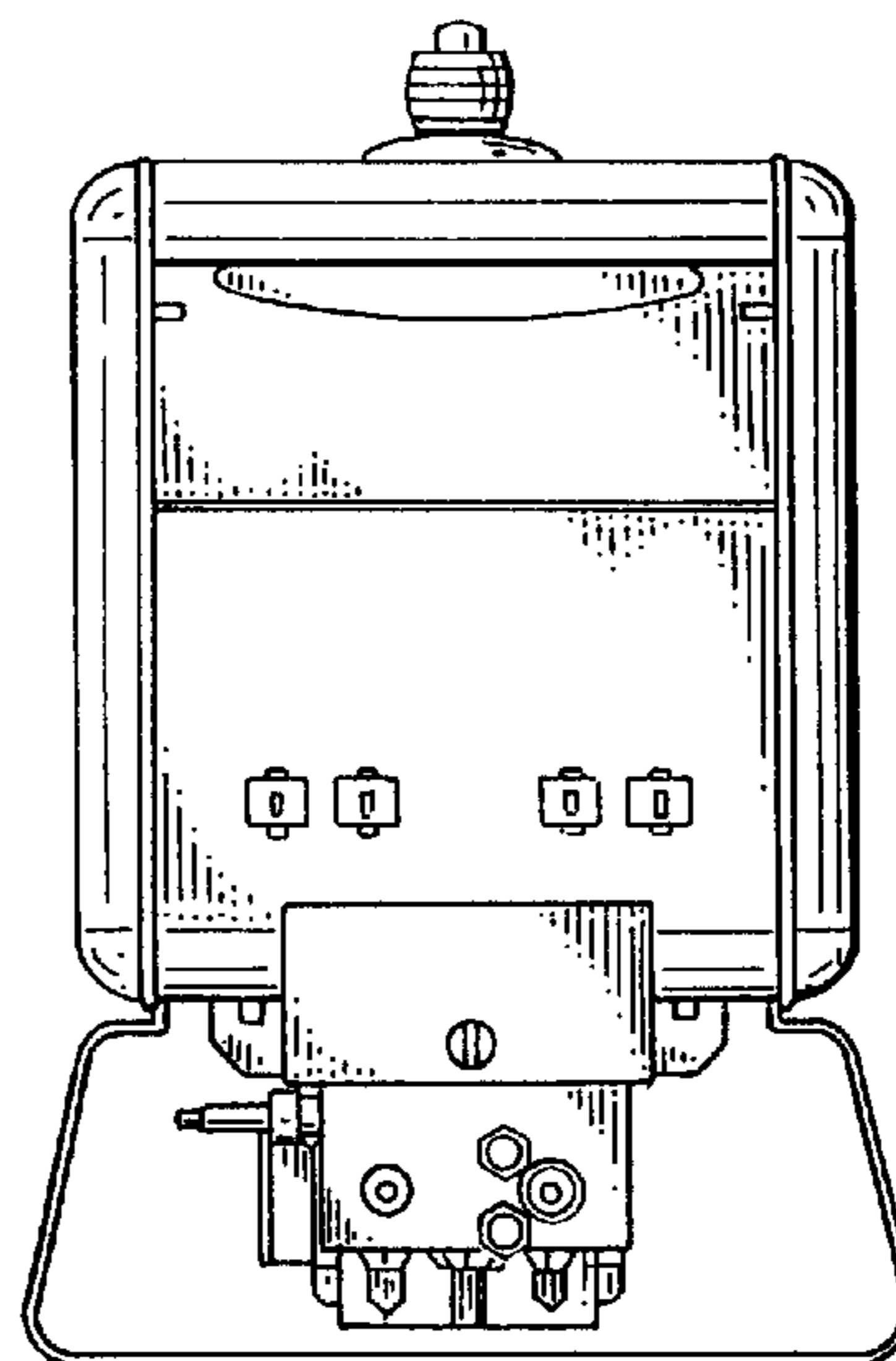


FIG.- 5



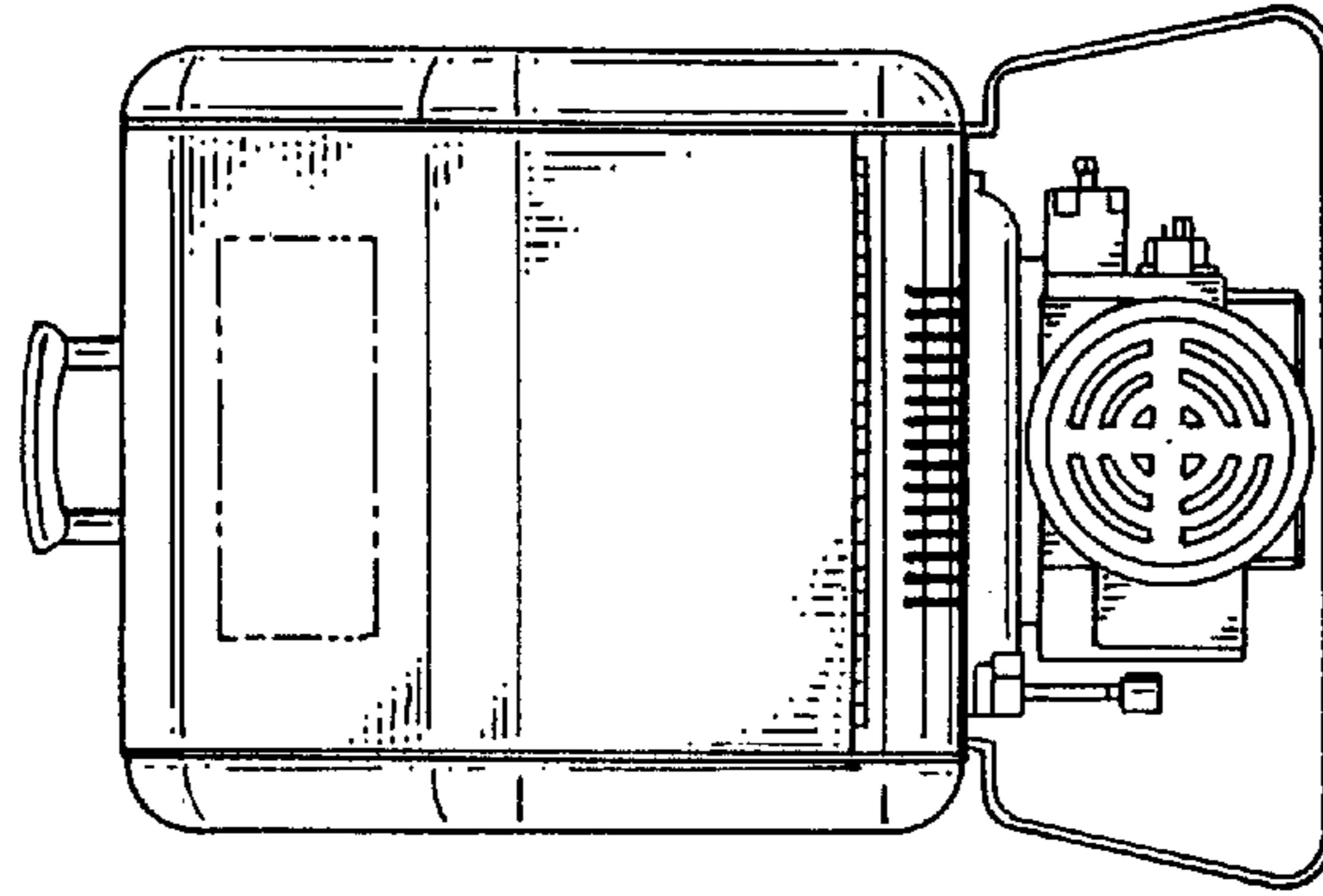


FIG.-7

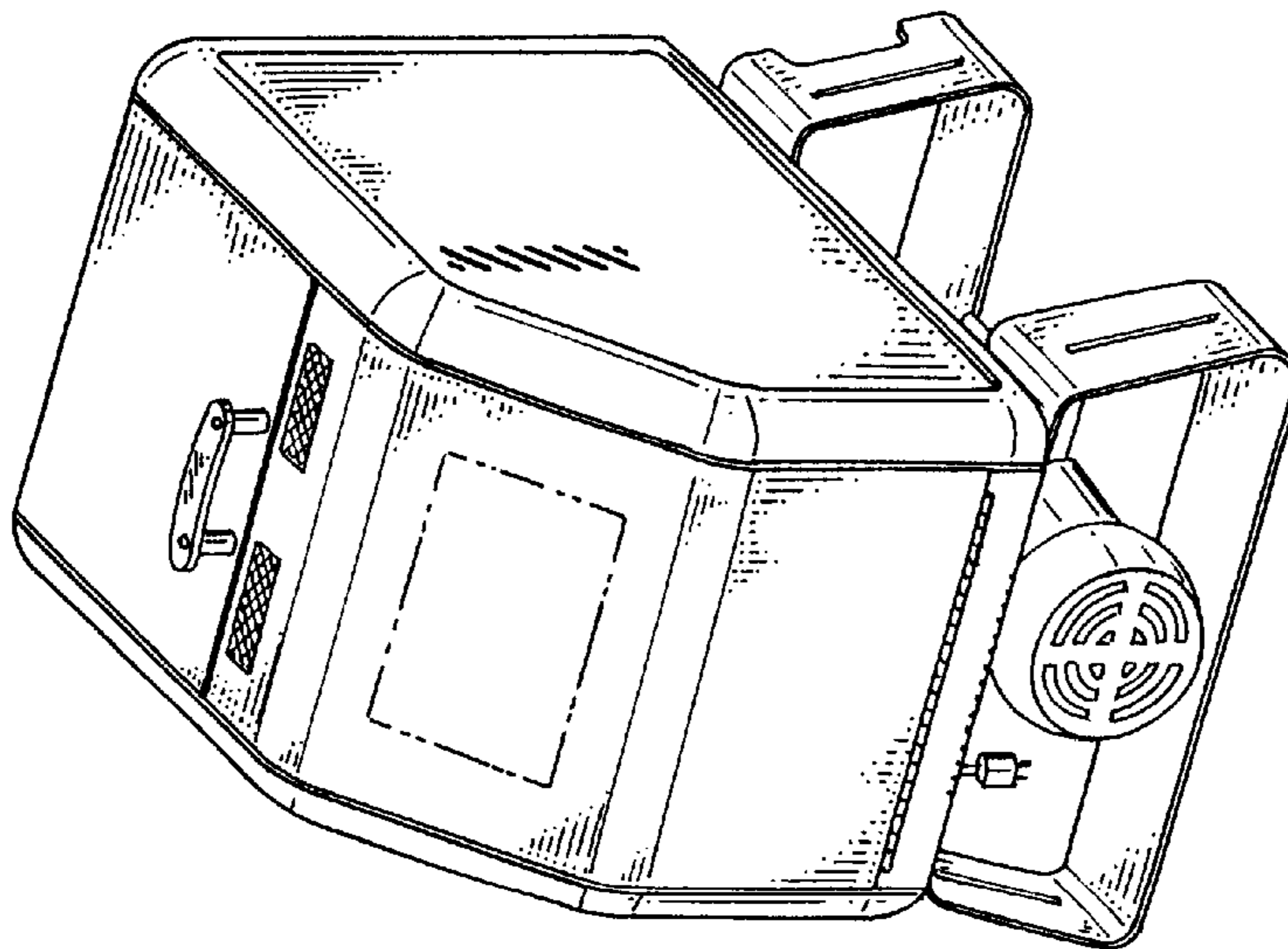


FIG.-6

FIG.-8

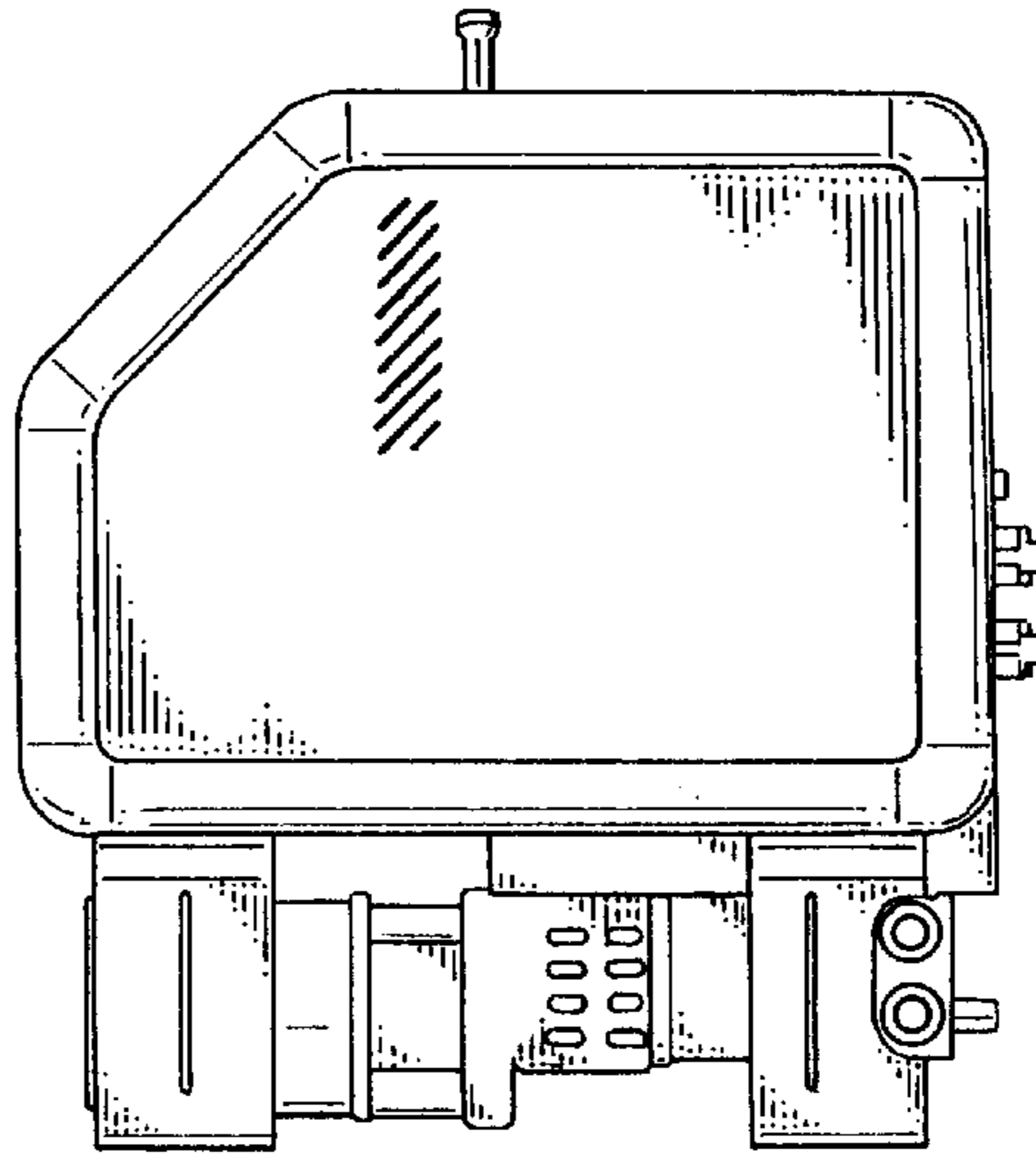


FIG.-9

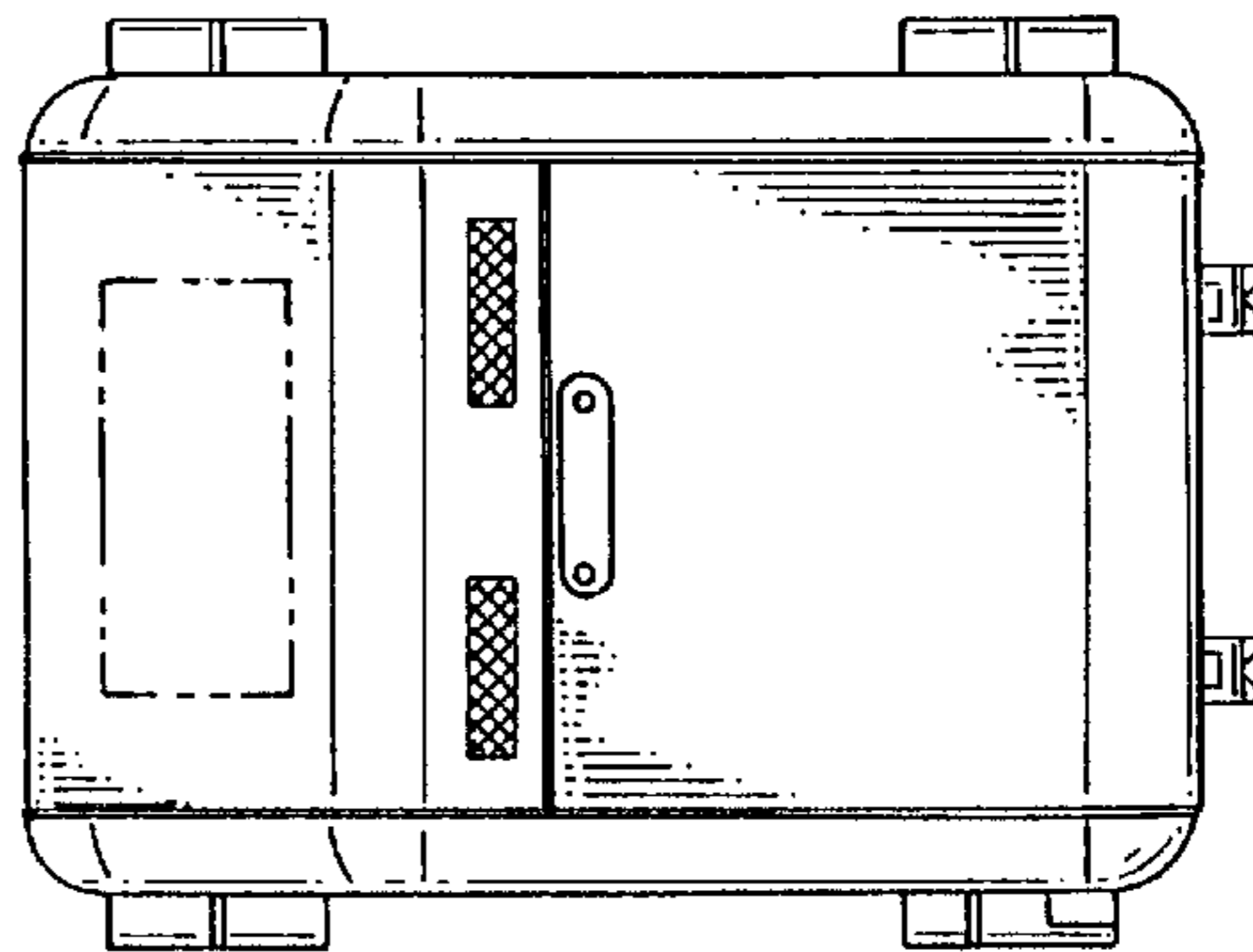
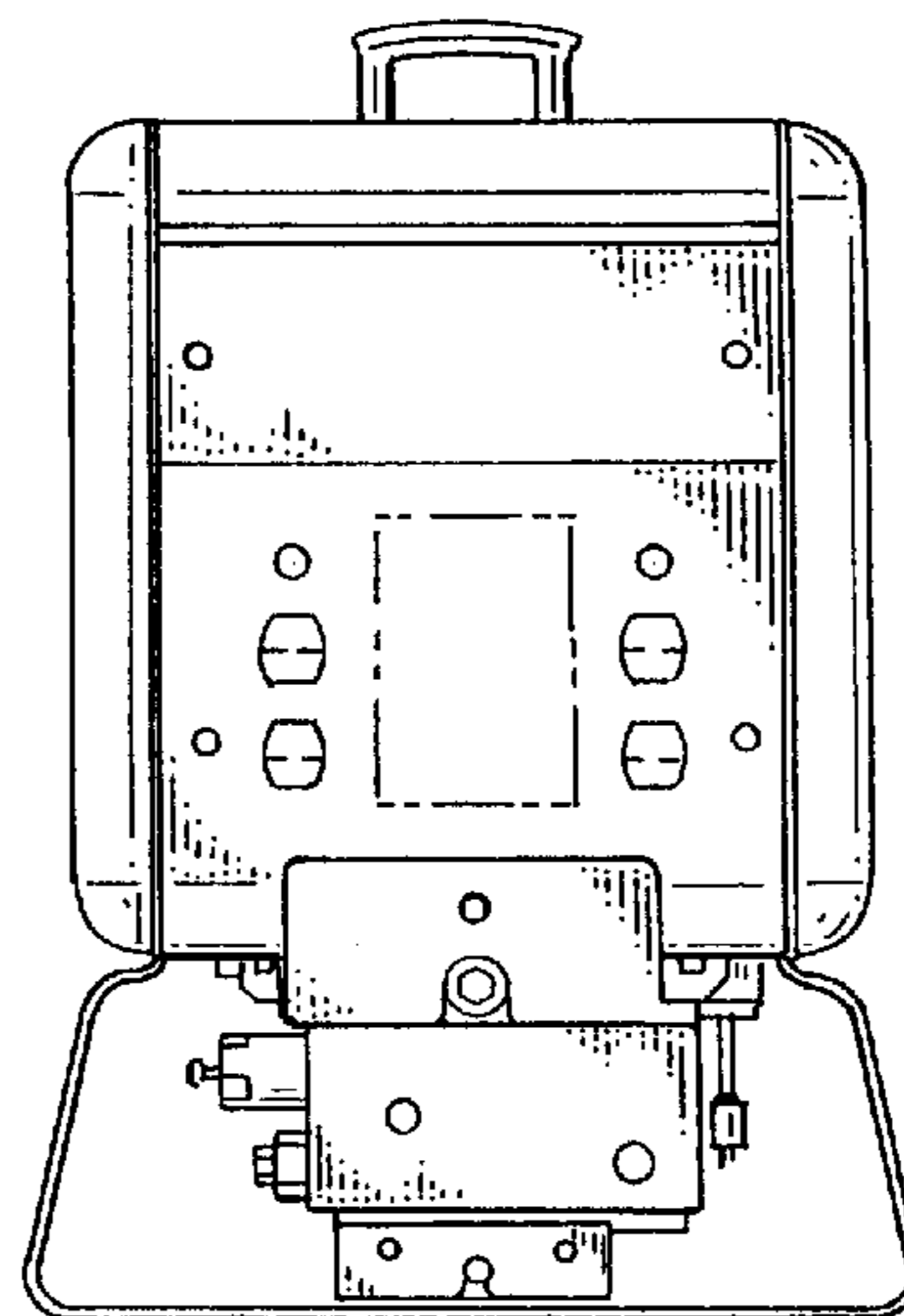


FIG.-10



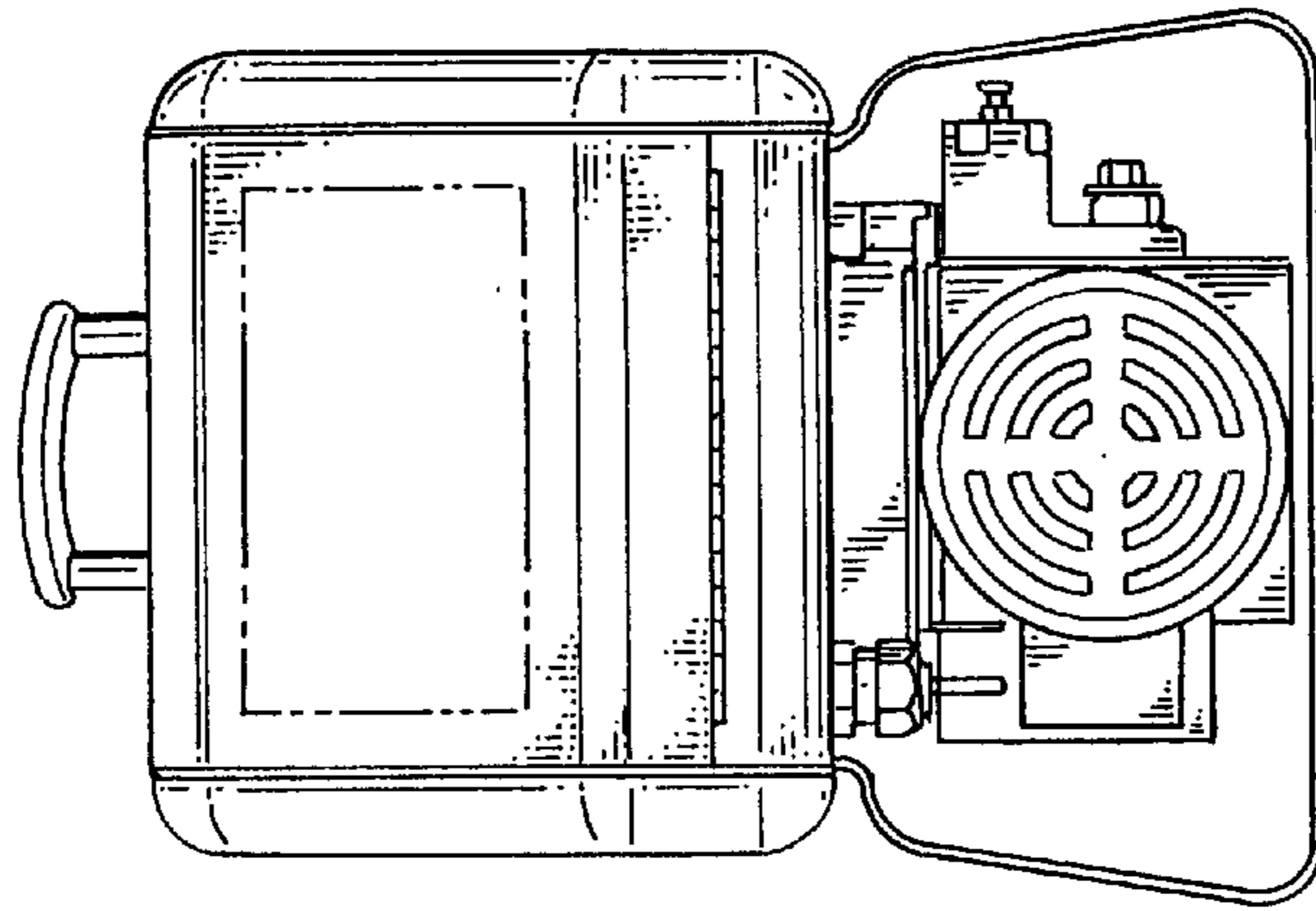


FIG. - 12

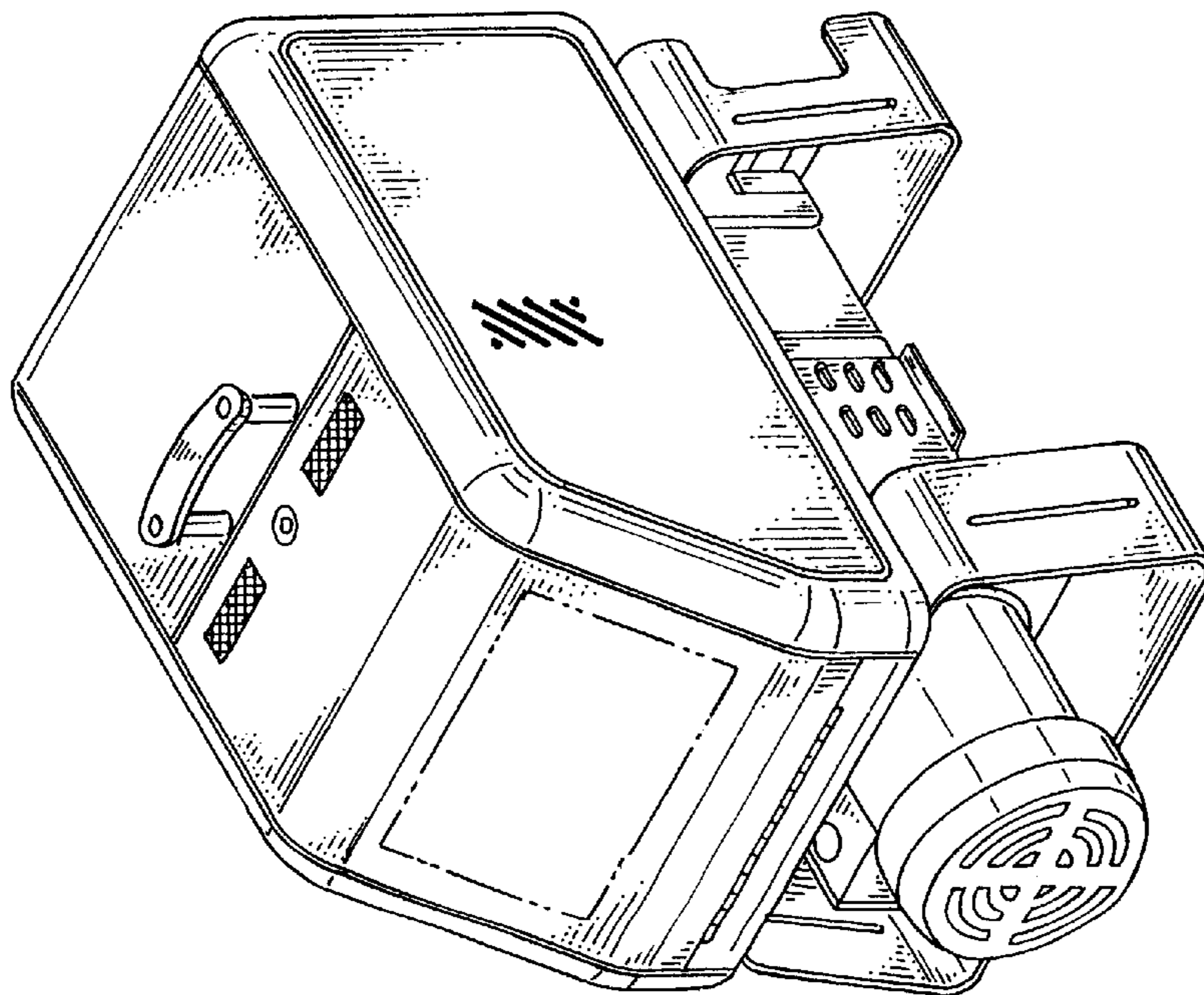


FIG. - 11

FIG.-13

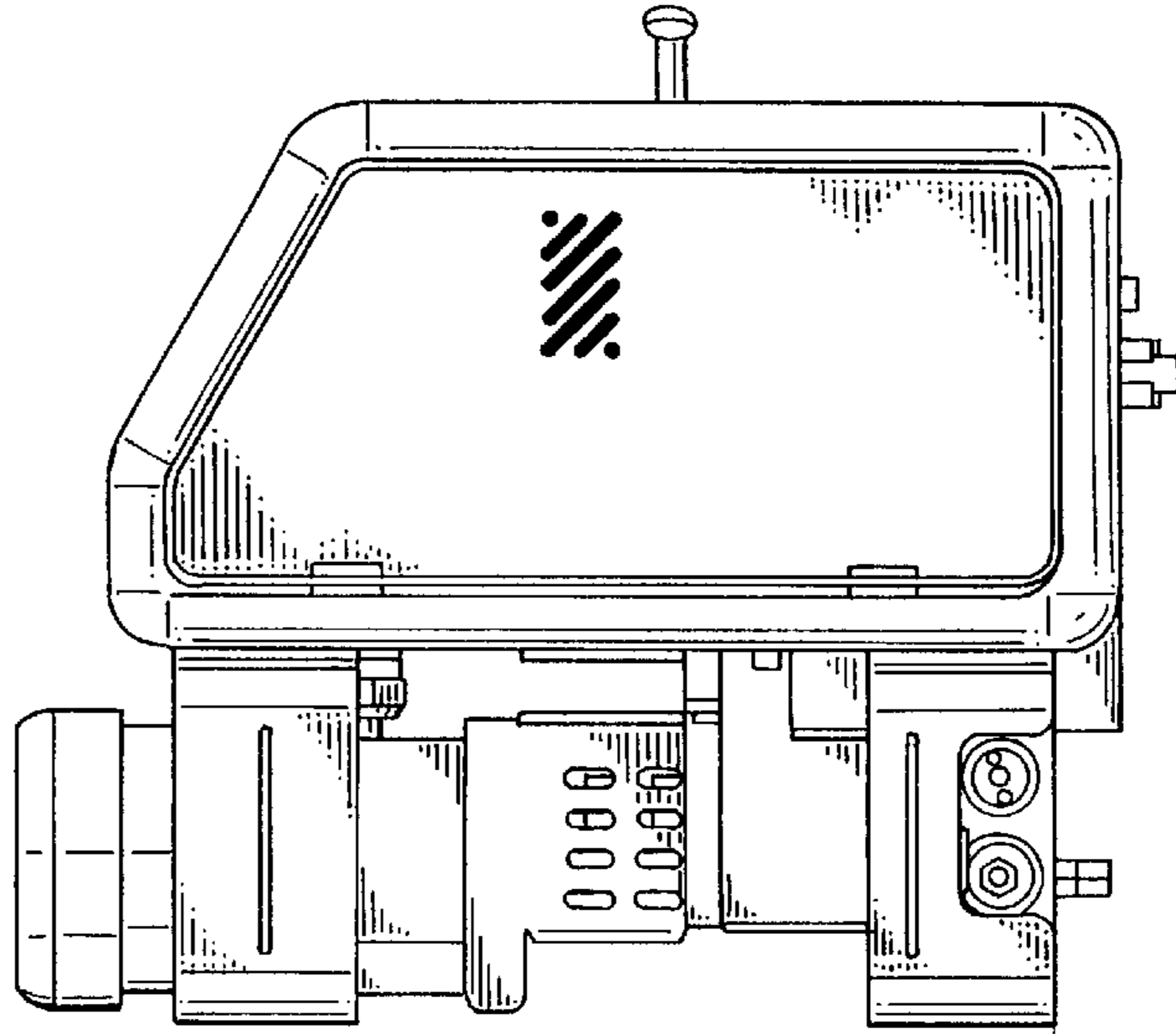


FIG.-14

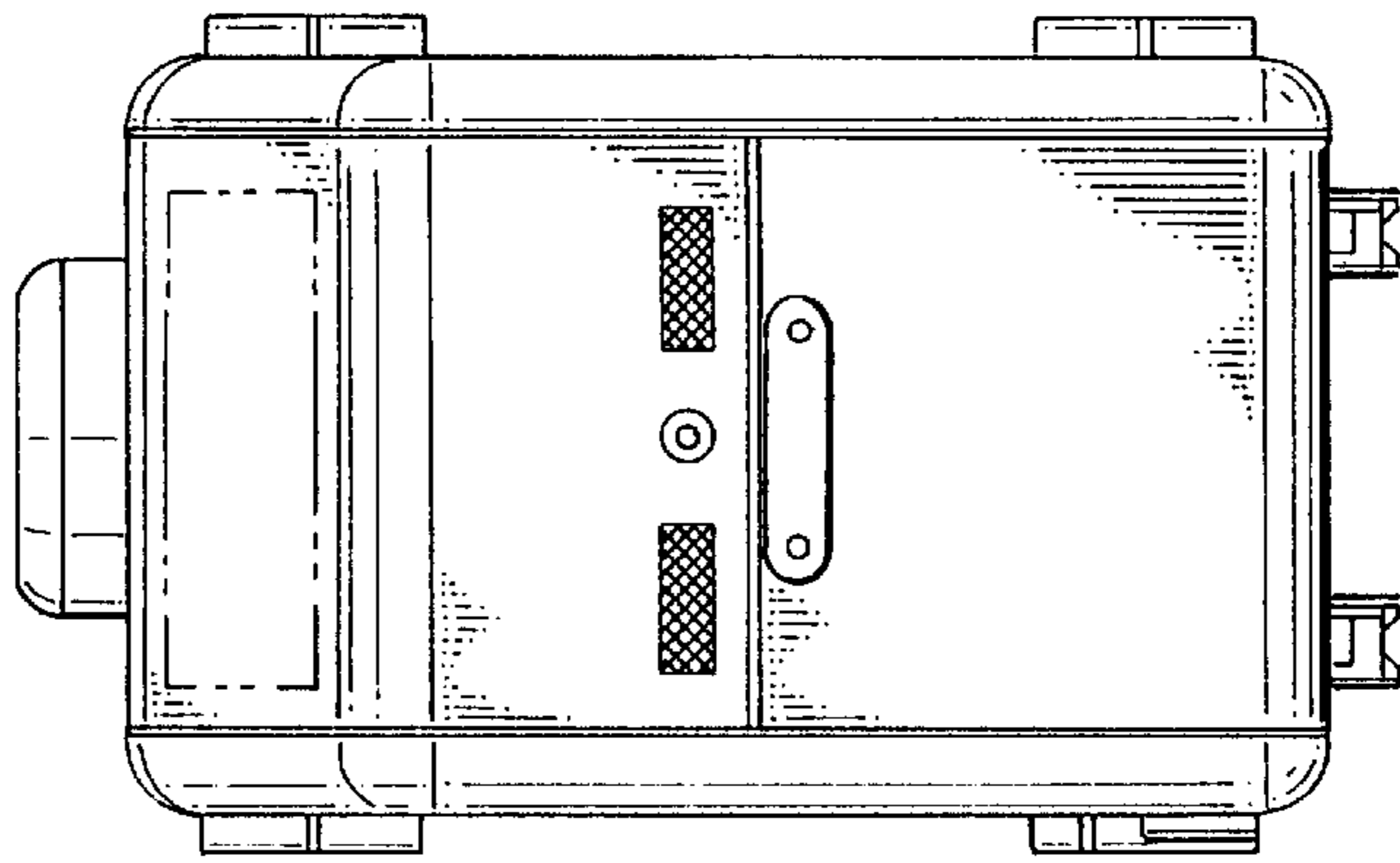


FIG.-15

